Abstract of the disclosure

Sub B4

Electroluminescent device comprising in this order

(a) an anode

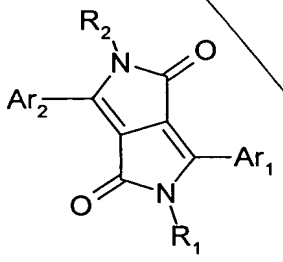
(b) a hole transporting layer

(c) a light-emitting layer

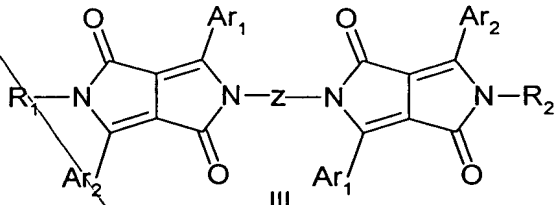
(d) optionally an electron transporting layer and

(e) a cathode

and a light-emitting substance, wherein the light-emitting substance is a diketopyrrolopyrrole represented by formula I or formula III



I

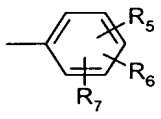
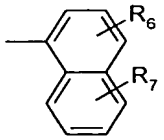
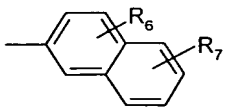
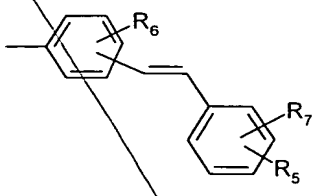


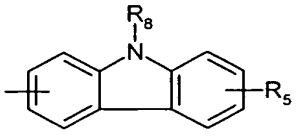
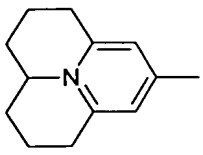
III

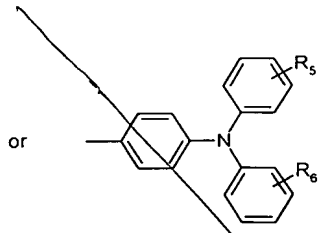
wherein R_1 and R_2, independently from each other, stand for C_1-C_{25}-alkyl, allyl which can be substituted one to three times with C_1-C_3alkyl or Ar_3, or $-CR_3R_4-(CH_2)_m-Ar_3$, wherein R_3 and R_4 independently from each other stand for hydrogen or C_1-C_4alkyl, or phenyl which can be substituted one to three times with C_1-C_3 alkyl,

Ar_3 stands for phenyl or 1- or 2-naphthyl which can be substituted one to three times with C_1-C_8alkyl, C_1-C_8alkoxy, halogen or phenyl, which can be substituted with C_1-C_8alkyl or C_1-C_8alkoxy one to three times, and m stands for 0, 1, 2, 3 or 4,

Ar_1 and Ar_2, independently from each other, stand for aryl radicals, preferably for

 or  or  or 

or  or julodidyl,  , which can be substituted one to four times with C_1-C_4alkyl, C_1-C_4alkoxy, or phenyl

or 

Sub B4 Cont'd

wherein

R_5, R_6 and R_7, independently from each other, stand for hydrogen, cyano, halogen, C_1-C_6alkyl, $-NR_8R_9$, $-OR_{10}$, $-S(O)_nR_8$, $-Se(O)_nR_8$, or phenyl, which can be substituted one to three times with C_1-C_8alkyl or C_1-C_8alkoxy,

wherein R_8 and R_9, independently from each other, stand for hydrogen, phenyl, C_1-C_{25}-alkyl, C_5-C_{12}-cycloalkyl, $-CR_3R_4-(CH_2)_m$-Ph, R_{10}, wherein R_{10} stands for C_6-C_{24}-aryl, or a saturated or unsaturated heterocyclic radical comprising five to seven ring atoms, wherein the ring consists of carbon atoms and one to three hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, wherein Ph, the aryl and heterocyclic radical can be substituted one to three times with C_1-C_8alkyl, C_1-C_8alkoxy, or halogen, or R_8 and R_9 stand for $-C(O)R_{10}$, wherein R_{11} can be C_1-C_{25}-alkyl, C_5-C_{12}-cycloalkyl, R_{10}, $-OR_{12}$ or $-NR_{13}R_{14}$, wherein R_{12}, R_{13}, and R_{14} stand for C_1-C_{25}-alkyl, C_5-C_{12}-cycloalkyl, C_6-C_{24}-aryl,

or

a saturated or unsaturated heterocyclic radical comprising five to seven ring atoms, wherein the ring consists of carbon atoms and one to three hetero atoms selected from the group consisting of nitrogen, oxygen and sulfur, wherein the aryl and heterocyclic radical can be substituted one to three times with C_1-C_8alkyl or C_1-C_8alkoxy, or $-NR_8R_9$ stands for a five- or sixmembered heterocyclic radical in which R_8 and R_9 together stand for tetramethylene, pentamethylene, $-CH_2-CH_2-O-CH_2-CH_2-$, or $-CH_2-CH_2-NR_5-CH_2-CH_2-$, preferably $-CH_2-CH_2-O-CH_2-CH_2-$, and n stands for 0, 1, 2 or 3,

and wherein Z stands for a diradical selected from the group consisting of a single bond, C_2-C_6alkylene, which can be substituted one to three times with C_1-C_4alkyl, C_1-C_4alkoxy, or phenyl, phenylene or naphthylene, processes for the preparation of compounds I, its uses and compositions comprising the compounds I and/or III.